

What is claimed is:

1. A wheel support bearing assembly for rotatably supporting a wheel relative to a vehicle body structure, the wheel support bearing assembly comprising:

an outer member having an outer peripheral surface formed with a vehicle body fitting flange for securement of the wheel support bearing assembly to a knuckle made of an aluminum alloy, the outer member also having an inner peripheral surface formed with raceways;

an inner member having a wheel mounting flange formed at one end thereof and also having raceways defined therein in alignment with the raceways in the outer member;

rows of rolling elements positioned between the raceways in the outer member and the raceways in the inner member, respectively; and

an electrically insulating layer provided at a surface area of contact between the outer member and the knuckle.

2. The wheel support bearing assembly as claimed in Claim 1, wherein the electrically insulating layer is provided on a portion of an outer peripheral surface of the outer member, that is received in the knuckle, and one of axial end faces of the vehicle body mounting flange confronting the knuckle.

3. The wheel support bearing assembly as claimed in Claim 1, wherein the electrically insulating layer comprises a plated ply and a coating ply formed on the plated ply, or solely a coating ply.

4. The wheel support bearing assembly as claimed in Claim 1, wherein the inner member is positioned inside the outer member with an annular working space defined therebetween, the annular working space having inboard and outboard open ends opposite to each other, and further comprising inboard and outboard sealing members for sealing the inboard and outboard open ends of the annular working space, respectively, at least one of the inboard and outboard

sealing members being a contact type seal having an electroconductive elastic element that is held in sliding contact.

5. The wheel support bearing assembly as claimed in Claim 4, wherein the at least one of the inboard and outboard sealing members comprises an electroconductive core metal fitted to one of the inner and outer members and the elastic element secured to the core metal.

6. The wheel support bearing assembly as claimed in Claim 4, further comprising an electroconductive slinger mounted on the inner member and wherein the at least one of the inboard and outboard sealing members is the inboard sealing member, the inboard sealing being fitted to the outer member and having a lip region that is held in sliding contact with the electroconductive slinger.